FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE -- RENEWAL

#### PERMITTEE

Wheeling Service & Supply, Inc. Attn: Larry J. Larson 15920 Nelson Road

Woodstock, Illinois 60098

Application No.: 84080068 I.D. No.: 111809AAB

Applicant's Designation: Date Received: September 8, 2008

Subject: Coil Coating Operation

Date Issued: May 21, 2014 Expiration Date: May 21, 2024

Location: 15920 Nelson Road, Woodstock, McHenry County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of Coil Coating Lines #1 and #2 with a curing oven each and both controlled by a catalytic afterburner pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
  - i. This federally enforceable state operating permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Volatile Organic Material (VOM), and 10 tons/year for any single Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
  - ii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs so that the source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Metal Coil, 40 CFR Part 63, Subpart SSSS.
  - iii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

- c. This permit supersedes all operating permit(s) for this location.
- 2a. Coil Coating Line #2 is subject to the New Source Performance Standards (NSPS) for Metal Coil Surface Coating, 40 CFR 60 Subparts A and TT. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 60.460(a) and (b), the provisions of 40 CFR 60 Subpart TT apply to the following affected facilities in a metal coil surface coating operation: each prime coat operation, each finish coat operation, and each prime and finish coat operation combined when the finish coat is applied wet on wet over the prime coat and both coatings are cured simultaneously that commences construction, modification, or reconstruction after January 5, 1981.
  - b. Pursuant to 40 CFR 60.462(a), on and after the date on which 40 CFR 60.8 requires a performance test to be completed, each owner or operator subject to 40 CFR 60 Subpart TT shall not cause to be discharged into the atmosphere more than:
    - i. 0.28 kilogram VOC per liter (kg VOC/ 1) of coating solids applied for each calendar month for each affected facility that does not use an emission control device(s); or
    - ii. 0.14 kg VOC/l of coating solids applied for each calendar month for each affected facility that continuously uses an emission control device(s) operated at the most recently demonstrated overall efficiency; or
    - iii. 10 percent of the VOC's applied for each calendar month (90 percent emission reduction) for each affected facility that continuously uses an emission control device(s) operated at the most recently demonstrated overall efficiency; or
- 3a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

- 4. Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.
- Pursuant to 35 Ill. Adm. Code 218.204(d), except as provided in 35 Ill. Adm. Code 218.205, 218.207, 218.208, 218.212, 218.215 and 218.216, no 5a. owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for Coil Coating. Except as otherwise provided in 35 Ill. Adm. Code 218.204(a), (c), (g), (h), (j), (l), (n), (p), and (q), compliance with the emission limitations is required on and after March 15, 1996. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with 35 Ill. Adm. Code 218 Subpart F must be demonstrated through the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(c) except where noted. The emission limitations are as follows:

Coil Coating kg/l lb/gal 0.20 (1.7)

- Pursuant to 35 Ill. Adm. Code 218.207(a), any owner or operator of a b. coating line subject to 35 Ill. Adm. Code 218.204, except coating lines subject to 35 Ill. Adm. Code 218.204(q)(6), may comply with 35 Ill. Adm. Code 218.207 (Alternative Emission Limitations), rather than with 35 Ill. Adm. Code 218.204, if a capture system and control device are operated at all times the coating line is in operation and the owner or operator demonstrates compliance with 35 Ill. Adm. Code 218.207(c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m), or (n) of (depending upon the source category) through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in 35 Ill. Adm. Code 218.105 and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(e); and the control device is equipped with the applicable monitoring equipment specified in 35 Ill. Adm. Code 218.105(d) and the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use. A capture system and control device, which does not demonstrate compliance with 35 Ill. Adm. Code 218.207(c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m), or (n) may be used as an alternative to compliance with 35 Ill. Adm. Code 218.204 only if the alternative is approved by the Illinois EPA and approved by the USEPA as a SIP revision.
- c. Pursuant to 35 Ill. Adm. Code 218.207(b)(1), the coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency.
- d. Pursuant to 35 Ill. Adm. Code 218.207(c), no owner or operator of a coating line subject to only one of the emission limitations from among 35 Ill. Adm. Code 218.204(a)(1)(A), (a)(1)(D), (a)(2)(A), (a)(2)(E), (a)(2)(F), (c)(1), (d), (e), (f), or (i) and equipped with a capture

system and control device shall operate the subject coating line unless the requirements in 35 Ill. Adm. Code 218.207(b)(1) or (b)(2) are met. No owner or operator of a coating line subject to 35 Ill. Adm. Code 218.204(a)(1)(B),r (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D) and equipped with a capture system and control device shall operate the coating line unless the owner or operator demonstrates compliance with such limitation in accordance with the topcoat protocol referenced in 35 Ill. Adm. Code 218.105(b)(1)(A) or (b)(1)(B), as applicable.

- e. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G (Use of Organic Material) shall apply only to photochemically reactive material.
- 6. This permit is issued based on Coil Coating Lines #1 and #2 at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Metal Coil, 40 CFR 63 Subpart SSSS. This is a result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs.
- This permit is issued based on the solvent cleaning operations at this 7a. source not being subject to the requirements of 35 Ill. Adm. Code 218.187(b). Pursuant to 35 Ill. Adm. Code 218.187(a)(1), on and after January 1, 2012: Except as provided in 35 Ill. Adm. Code 218.187(a)(2), the requirements of 35 Ill. Adm. Code 218.187 shall apply to all cleaning operations that use organic materials at sources that emit a total of 226.8 kg per calendar month (500 lbs per calendar month) or more of VOM, in the absence of air pollution control equipment, from cleaning operations at the source other than cleaning operations identified in 35 Ill. Adm. Code 218.187(a)(2). For purposes of 35 Ill. Adm. Code 218.187, "cleaning operation" means the process of cleaning products, product components, tools, equipment, or general work areas during production, repair, maintenance, or servicing, including but not limited to spray gun cleaning, spray booth cleaning, large and small manufactured components cleaning, parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank cleaning, at sources with emission units;
  - b. Pursuant to 35 Ill. Adm. Code 218.209, no owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 is required to meet the limitations of 35 Ill. Adm. Code 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302), after the date by which the coating line is required to meet 35 Ill. Adm. Code 218.204.
- 8. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring

results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

- 9a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- b. The catalytic afterburner shall be in operation at all times when the associated coil coating lines are in operation and emitting air contaminants.
- c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the catalytic afterburner associated with the coil coating lines such that the catalytic afterburner is kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- d. The catalytic afterburner combustion chamber shall be preheated to at least the manufacturer's recommended temperature of 525□F, but no less than the temperature at which compliance was demonstrated in the most recent compliance test, before the coating process is begun. This temperature shall be maintained during operation.
- 10a. Emissions of volatile organic materials (VOM) from coil coating operations shall not exceed the following limits:

	VOM Emissio	ns
Process	Tons/Month	Tons/year
Coating Application	1.88	18.8
Clean-Up Operations	0.20	2.0
	Total:	20.8

These limits are based on the actual emissions determined from the maximum production capacity. The emissions of VOM shall be determined from the following equation:

$$\square$$
 (P<sub>i</sub> x D<sub>i</sub> x C<sub>i</sub>) x (1-C<sub>ef</sub>) +  $\square$  (S<sub>i</sub> x D<sub>i</sub> x C<sub>i</sub>)

### Where:

 $P_i = Coating Usage (gallons);$ 

 $D_i = Density of Coating (lbs/gallon);$ 

 $C_i$  = VOM Content of the Coating (% by Weight);

 $C_{ef} = 0.9$  (minimum required by 40 CFR 60.462(a)(3));

 $S_i = Clean-Up Solvent Usage (gallons);$ 

 $D_j$  = Density of Clean-up Solvent (lbs/gallon); and

C<sub>i</sub> = VOM Content of Clean-up Solvent (% by Weight);

b. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 1.5 tons/month and 15.0 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirements of to obtain a Clean Air Act Permit Program (CAAPP) Permit and the NESHAP for Surface Coating of Metal Coil, 40 CFR 63 Subpart SSSS.

- c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 11a. Pursuant to 40 CFR 60.8(a), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).
  - b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:
    - i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
    - ii. Approves the use of an equivalent method;
    - iii. Approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance;
    - iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or
    - v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.
  - c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
  - d. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

- i. Sampling ports adequate for test methods applicable to such facility. This includes:
  - A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test 1 methods and procedures; and
  - B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
- ii. Safe sampling platform(s).
- iii. Safe access to sampling platform(s).
- iv. Utilities for sampling and testing equipment.
- 12a. Pursuant to 40 CFR 60.463(b), the owner or operator of an affected facility shall conduct an initial performance test as required under 40 CFR 60.8(a) and thereafter a performance test for each calendar month for each affected facility according to the procedures in 40 CFR 60.463.
  - b. Pursuant to 40 CFR 60.463(c), the owner or operator shall use the following procedures for determining monthly volume-weighted average emissions of VOC's in kg/l of coating solids applied.
    - An owner or operator shall use the following procedures for each affected facility that does not use a capture system and control device to comply with the emission limit specified under 40 CFR 60.462(a)(1). The owner or operator shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating or by an analysis of each coating, as received, using Method 24. The Illinois EPA or USEPA may require the owner or operator who uses formulation data supplied by the manufacturer of the coatings to determine the VOC content of coatings using Method 24 or an equivalent or alternative method. The owner or operator shall determine the volume of coating and the mass of VOC-solvent added to coatings from company records on a monthly basis. If a common coating distribution system serves more than one affected facility or serves both affected and existing facilities, the owner or operator shall estimate the volume of coating used at each affected facility by using the average dry weight of coating and the surface area coated by each affected and existing facility or by other procedures acceptable to the Illinois EPA or USEPA.
      - A. Calculate the volume-weighted average of the total mass of VOC's consumed per unit volume of coating solids applied during each calendar month for each affected facility, except as provided under 40 CFR 60.463(c)(1)(iv). The weighted average of the total mass of VOC's used per unit volume of coating solids applied each calendar month is determined by the following procedures.
        - I. Calculate the mass of VOC's used (Mo + Md) during each calendar month for each affected facility by using Equation 1 in 40 CFR 60.463(c)(1)(i)(A).

$$M_o + M_d = \sum_{i=1}^{n} L_{ci} D_{ci} W_{oi} + \sum_{j=1}^{m} L_{dj} D_{dj}$$
 Equation 1

 $(SL_{\rm dj}D_{\rm dj}$  will be 0 if no VOC solvent is added to the coatings, as received)

#### Where:

 $\ensuremath{\text{n}}$  is the number of different coatings used during the calendar month, and

 ${\tt m}$  is the number of different VOC solvents added to coatings used during the calendar month.

II. Calculate the total volume of coating solids used ( $L_{\rm s}$ ) in each calendar month for each affected facility by the following equation:

$$L_s = \sum_{i=1}^{n} V_{si} L_{ci} \qquad \text{Equation 2}$$

Where:

 $\ensuremath{\mathbf{n}}$  is the number of different coatings used during the calendar month.

III. Calculate the volume-weighted average mass of VOC's used per unit volume of coating solids applied (G) during the calendar month for each affected facility by the following equation:

$$G = \frac{M_o + M_d}{L_s}$$
 Equation 3

B. Calculate the volume-weighted average of VOC emissions to the atmosphere (N) during the calendar month for each affected facility by the following equation:

## N = G Equation 4

- C. Where the volume-weighted average mass of VOC's discharged to the atmosphere per unit volume of coating solids applied (N) is equal to or less than 0.28 kg/l, the affected facility is in compliance.
- D. If each individual coating used by an affected facility has a VOC content, as received, that is equal to or less than 0.28 kg/l of coating solids, the affected facility is in compliance provided no VOC's are added to the coatings during distribution or application.
- ii. An owner or operator shall use the following procedures for each affected facility that continuously uses a capture system and a control device that destroys VOC's (e.g., incinerator) to comply with the emission limit specified under 40 CFR 60.462(a)(2) or (3).

A. Determine the overall reduction efficiency (R) for the capture system and control device.

For the initial performance test, the overall reduction efficiency (R) shall be determined as prescribed in 40 CFR 60.463(c)(2)(i) (A), (B), and (C). In subsequent months, the owner or operator may use the most recently determined overall reduction efficiency (R) for the performance test, providing control device and capture system operating conditions have not changed. The procedure in 40 CFR 60.463(c)(2)(i) (A), (B), and (C), shall be repeated when directed by the Illinois EPA or USEPA or when the owner or operator elects to operate the control device or capture system at conditions different from the initial performance test.

I. Determine the fraction (F) of total VOC's emitted by an affected facility that enters the control device using the following equation:

$$F = \frac{\sum_{i=1}^{r} C_{bi}Q_{bi}}{\sum_{i=1}^{r} C_{bi}Q_{bi} + \sum_{i=1}^{r} C_{fi}Q_{fi}}$$
 Equation 5

Where:

 $\ensuremath{\mathbf{l}}$  is the number of gas streams entering the control device, and

 $\ensuremath{\mathsf{p}}$  is the number of gas streams emitted directly to the atmosphere.

II. Determine the destruction efficiency of the control device (E) using values of the volumetric flow rate of each of the gas streams and the VOC content (as carbon) of each of the gas streams in and out of the device by the following equation:

$$E = \frac{\sum\limits_{i=1}^{n}Q_{ii}C_{ii} - \sum\limits_{j=1}^{n}Q_{ij}C_{ii}}{\sum\limits_{i=1}^{n}Q_{ii}C_{ii}}$$
 Equation 6

Where:

 $\ensuremath{\mathbf{n}}$  is the number of gas streams entering the control device, and

 $\ensuremath{\mathtt{m}}$  is the number of gas streams leaving the control device and entering the atmosphere.

The owner or operator of the affected facility shall construct the VOC emission reduction system so that all volumetric flow rates and total VOC emissions can be accurately determined by the applicable test methods and procedures specified in 40 CFR 60.466. The owner or operator of the affected facility shall construct a temporary enclosure around the coating

applicator and flashoff area during the performance test for the purpose of evaluating the capture efficiency of the system. The enclosure must be maintained at a negative pressure to ensure that all VOC emissions are measurable. If a permanent enclosure exists in the affected facility prior to the performance test and the Illinois EPA or USEPA is satisfied that the enclosure is adequately containing VOC emissions, no additional enclosure is required for the performance test.

III. Determine overall reduction efficiency (R) using
the following equation:

## R=EF Equation 7

If the overall reduction efficiency (R) is equal to or greater than 0.90, the affected facility is in compliance and no further computations are necessary. If the overall reduction efficiency (R) is less than 0.90, the average total VOC emissions to the atmosphere per unit volume of coating solids applied (N) shall be computed as follows.

- B. Calculate the volume-weighted average of the total mass of VOC's per unit volume of coating solids applied (G) during each calendar month for each affected facility using equations in 40 CFR 60.463(c)(1)(i) (A), (B), and (C).
- C. Calculate the volume-weighted average of VOC emissions to the atmosphere (N) during each calendar month by the following equation:

# N=G(1-R) Equation 8

- D. If the volume-weighted average mass of VOC's emitted to the atmosphere for each calendar month (N) is less than or equal to  $0.14~\rm kg/l$  of coating solids applied, the affected facility is in compliance. Each monthly calculation is a performance test.
- c. Pursuant to 40 CFR 60.466(a), the reference methods in appendix A to 40 CFR Part 60, except as provided under 40 CFR 60.8(b), shall be used to determine compliance with 40 CFR 60.462 as follows:
  - i. Method 24, or data provided by the formulator of the coating, shall be used for determining the VOC content of each coating as applied to the surface of the metal coil. In the event of a dispute, Method 24 shall be the reference method. When VOC content of waterborne coatings, determined by Method 24, is used to determine compliance of affected facilities, the results of the Method 24 analysis shall be adjusted as described in Section 12.6 of Method 24;
  - ii. Method 25, both for measuring the VOC concentration in each gas stream entering and leaving the control device on each stack equipped with an emission control device and for measuring the VOC

concentration in each gas stream emitted directly to the atmosphere;

- iii. Method 1 for sample and velocity traverses;
- iv. Method 2 for velocity and volumetric flow rate;
- v. Method 3 for gas analysis; and
- vi. Method 4 for stack gas moist.
- d. Pursuant to 40 CFR 60.466(b), for Method 24, the coating sample must be at least a 1-liter sample taken at a point where the sample will be representative of the coating as applied to the surface of the metal coil.
- e. Pursuant to 40 CFR 60.466(c) For Method 25, the sampling time for each of three runs is to be at least 60 minutes, and the minimum sampling volume is to be at least 0.003 dscm (0.11 dscf); however, shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Illinois EPA or USEPA.
- 13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
  - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
  - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
  - b. Testing required by Condition 14 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

- 14. Pursuant to 35 Ill. Adm. Code 218.211(a), the VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 to establish the records required under 35 Ill. Adm. Code 218.211.
- 15a. Pursuant to 40 CFR 60.464(a), where compliance with the numerical limit specified in 40 CFR 60.462(a) (1) or (2) is achieved through the use of low VOC-content coatings without the use of emission control devices or through the use of higher VOC-content coatings in conjunction with emission control devices, the owner or operator shall compute and record the average VOC content of coatings applied during each calendar month for each affected facility, according to the equations provided in 40 CFR 60.463.
  - b. Pursuant to 40 CFR 60.464(c), if thermal incineration is used, each owner or operator subject to the provisions of this subpart shall install, calibrate, operate, and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance with 40 CFR 60.462(a)(2), (3), or (4). This device shall have an accuracy of  $\pm 2.5$  °C. or  $\pm 0.75$  percent of the temperature being measured expressed in degrees Celsius, whichever is greater. Each owner or operator shall also record all periods (during actual coating operations) in excess of 3 hours during which the average temperature in any thermal incinerator used to control emissions from an affected facility remains more than 28  $^{\circ}\text{C}$  (50  $^{\circ}\text{F}) below the temperature at which$ compliance with 40 CFR 60.462(a)(2), (3), or (4) was demonstrated during the most recent measurement of incinerator efficiency required by 40 CFR 60.8. The records required by 40 CFR 60.7 shall identify each such occurrence and its duration. If catalytic incineration is used, the owner or operator shall install, calibrate, operate, and maintain a device to monitor and record continuously the gas temperature both upstream and downstream of the incinerator catalyst bed. This device shall have an accuracy of  $\pm 2.5$  °C. or  $\pm 0.75$  percent of the temperature being measured expressed in degrees Celsius, whichever is greater. During coating operations, the most recent measurement of incinerator efficiency or when the inlet temperature falls more than 28 °C (50 °F) below the temperature at which compliance with 40 CFR 60.462(a)(2), (3), or (4) was demonstrated during the most recent measurement of incinerator efficiency required by 40 CFR 60.8. The records required by 40 CFR 60.7 shall identify each such occurrence and its duration.
- 16a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(ii), an owner or operator that uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor for each afterburner which has a catalyst bed, commonly known as a catalytic afterburner, the temperature rise across each catalytic afterburner bed or VOM concentration of exhaust.
  - b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having

- an accuracy of  $\pm$  1 percent of the temperature measured in degrees Celsius or  $\pm$  0.5° C, whichever is greater.
- 17a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
  - b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
- 18. Pursuant to 40 CFR 60.465(e), each owner or operator subject to the provisions of 40 CFR 60 Subpart TT shall maintain at the source, for a period of at least 2 years, records of all data and calculations used to determine monthly VOC emissions from each affected facility and to determine the monthly emission limit, where applicable. Where compliance is achieved through the use of thermal incineration, each owner or operator shall maintain, at the source, daily records of the incinerator combustion temperature. If catalytic incineration is used, the owner or operator shall maintain at the source daily records of the gas temperature, both upstream and downstream of the incinerator catalyst bed.
- Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that 19. his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5years after the determination, or until the source changes its operations to become an affected source, whichever comes first. record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA quidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the

results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

- 20a. Pursuant to 35 Ill. Adm. Code 218.187(e)(1)(B), the owner or operator of a source exempt from the limitations of 35 Ill. Adm. Code 218.187 because of the criteria in 35 Ill. Adm. Code 218.187(a)(1) shall on and after January 1, 2012, collect and record the following information each month for each cleaning operation, other than cleaning operations identified in 35 Ill. Adm. Code 218.187 (a)(2):
  - The name and identification of each VOM-containing cleaning solution as applied in each cleaning operation;
  - ii. The VOM content of each cleaning solution as applied in each cleaning operation;
  - iii. The weight of VOM per volume and the volume of each as-used cleaning solution; and
  - iv. The total monthly VOM emissions from cleaning operations at the source;
  - b. Pursuant to 35 Ill. Adm. Code 218.187(e)(10), all records required by this 35 Ill. Adm. Code 218.187(e) shall be retained by the source for at least three years and shall be made available to the Illinois EPA upon request.
  - c. Pursuant to 35 Ill. Adm. Code 218.211(c)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 other than 35 Ill. Adm. Code 218.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D) and complying by means of 35 Ill. Adm. Code 218.204 shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day, unless otherwise specified, for each coating line and maintain the information at the source for a period of three years:
    - i. The name and identification number of each coating as applied on each coating line;
    - ii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
  - d. Pursuant to 35 Ill. Adm. Code 218.211(e)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.207 and complying by means of 35 Ill. Adm. Code 218.207(c), (d), (e), (f), (g), (h), (l), (m), or (n) shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
    - Control device monitoring data.

- ii. A log of the operating time for the capture system, control device, monitoring equipment and the associated coating line.
- iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- 21a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the Conditions of this permit:
  - i. Records addressing use of good operating practices for the catalytic afterburner associated with the coil coating lines:
    - A. Records for periodic inspection of the catalytic afterburner associated with the coil coating lines with date, individual performing the inspection, and nature of inspection; and
    - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
    - C. At least once a year, the catalyst bed level in the catalytic afterburner shall be checked and recorded.
    - D. Any addition or replacement of catalyst shall be recorded.
  - ii. A record shall be kept of all odor complaints received directly or referred from a responsible government agency. The Permittee shall conduct an investigation and submit a report within 10 working days to the Illinois EPA's Regional Office detailing the complaint, efforts made to identify the odor cause, and the conclusions of the investigation. The report shall include the following information:
    - A. Hourly wind speed and wind direction during the complaint time period.
    - B. Name, address, and telephone number of person making complaint, if available.
  - iii. Usage of each coating (gallons/month and gallons/year);
  - iv. Density of each coating used (lbs/gallon);
  - v. VOM and HAP content of each coating usage (% by Weight);
  - vi. Usage of each clean-up solvent (gallons/day);
  - vii. Density of each clean-up solvent (lbs/gallon);
  - viii. VOM and HAP content of each clean-up solvent (% by Weight); and
  - ix. Monthly and annual emissions of VOM and HAP from the source with supporting calculations (tons/month and tons/year).
  - b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and

copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

- 22a. Pursuant to 40 CFR 60.465(c), following the initial performance test, the owner or operator of an affected facility shall identify, record, and submit a written report to the Illinois EPA or USEPA every calendar quarter of each instance in which the volume-weighted average of the local mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under 40 CFR 60.462. If no such instances have occurred during a particular quarter, a report stating this shall be submitted to the Illinois EPA or USEPA semiannually.
  - b. Pursuant to 40 CFR 60.465(d), the owner or operator of each affected facility shall also submit reports at the frequency specified in 40 CFR 60.7(c) when the incinerator temperature drops as defined under 40 CFR 60.464(c). If no such periods occur, the owner or operator shall state this in the report
- 23a. Pursuant to 35 Ill. Adm. Code 218.187(e)(1)(C), the owner or operator of a source exempt from the limitations of 35 Ill. Adm. Code 218.187 because of the criteria in 35 Ill. Adm. Code 218.187(a)(1) shall comply with the following: Notify the Illinois EPA of any record that shows that the combined emissions of VOM from cleaning operations at the source, other than cleaning operations identified in 35 Ill. Adm. Code 218.187(a)(2), ever equal or exceed 226.8 kg/month (500 lbs/month), in the absence of air pollution control equipment, within 30 days after the event occurs.
  - b. Pursuant to 35 Ill. Adm. Code 218.211(c), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 other than 35 Ill. Adm. Code 218.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D) and complying by means of 35 Ill. Adm. Code 218.204 shall comply with the following:
    - i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new coating line, or upon changing the method of compliance from an existing subject coating line from 35 Ill. Adm. Code 218.205, 35 Ill. Adm. Code 218.207, 35 Ill. Adm. Code 218.215, or 35 Ill. Adm. Code 218.216 to 35 Ill. Adm. Code 218.204; the owner or operator of a subject coating line shall certify to the Illinois EPA that the coating line will be in compliance with 35 Ill. Adm. Code 218.204 on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date. The certification shall include:
      - A. The name and identification number of each coating as applied on each coating line;
      - B. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line;

- ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject coating line shall notify the Illinois EPA in the following instances:
  - A. Any record showing violation of 35 Ill. Adm. Code 218.204 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurance of the violation.
  - B. At least 30 calendar days before changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d)(1) or (e)(1), as applicable. Upon changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d) or (e), as applicable.
- c. Pursuant to 35 Ill. Adm. Code 218.211(e), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.207 and complying by means of 35 Ill. Adm. Code 218.207(c), (d), (e), (f), (g), (h), (l), (m), or (n) shall comply with the following:
  - i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new coating line, or upon changing the method of compliance for an existing coating line from 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.205 to 35 Ill. Adm. Code 218.207, the owner or operator of the subject coating line shall perform all tests and submit to the Illinois EPA the results of all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with 35 Ill. Adm. Code 218.207 on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date.
  - ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject coating line shall notify the Illinois EPA in the following instances:
    - A. Any record showing violation of 35 Ill. Adm. Code 218.207 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
    - B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code 218 Subpart F from 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.205, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.207(c)(1) or (d)(1), respectively. Upon changing the method of compliance with 35 Ill. Adm. Code 218 Subpart F from 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.205, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.207(c) or (d), respectively.
- 24a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the

Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.

b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

 $\underline{\text{and}}$  one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency Division of Air Pollution Control 9511 West Harrison Des Plaines, Illinois 60016

If you have any questions on this, please call David Hulskotter at 217/785-1705.

Raymond E. Pilapil	Date Signed:	
Acting Manager, Permit Section		
Division of Air Pollution Control		

REP:DWH:jws

cc: Illinois EPA, FOS Region 1 Lotus Notes

## Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the coil coating plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for VOM, 10 tons/year for any single HAP, and 25 tons per year for any combination of such HAP) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

		EMISS	IONS (Tons,	/Year)
Emission Unit		VOM	Single HAP	Total HAPs
Coating Application		18.8		
Clean-Up Operations		2.0		
	Totals	20.8	9.0	15.0